Attorney's Docket No.: 08919-067001 / 13A-900806

livines , lleg. No.

Applicant: Su-May Yu et al. Serial No.: 10/050,763 Filed: January 16, 2002

Page : 4

## REMARKS

Applicants hereby submit that the enclosures fulfill the requirements under 37 C.F.R. §1.821-1.825. The amendments in the specification merely insert the paper copy of the Sequence Listing and sequence identifiers in the specification. No new matter has been added.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment.

Please apply any charges or credits to Deposit Account No. 06-1050, referencing attorney docket no. 08919-067001.

Respectfully submitted,

Date: 4-19-2002

Y. Rocky Tsao

Reg. No. 34,053

Fish & Richardson P.C. 225 Franklin Street

Boston, Massachusetts 02110-2804

Telephone: (617) 542-5070 Facsimile: (617) 542-8906

20403014.doc

Applicant: Su-May Yu et al. Serial No.: 10/050,763 Filed: January 16, 2002

Page:

## "Version With Markings to Show Changes Made"

## In the specification:

Paragraph beginning at page 14, line 27, has been amended as follows:

The 1351-bp glutelin gene promoter region was PCR-amplified using rice genomic DNA as template and B1-5 (5'-GGGGAATTCGATCTCGATTTTTGAGGAAT-3' (SEQ ID NO:3), EcoRI site underlined) as forward primer and B1-3 (5'-GGGGGATCCCATAGCTATTTGTAC TTGCT-3' (SEQ ID NO:4), BamHI site underlined) as reverse primer. The glutelin gene promoter plus 75-bp putative signal peptide sequence was PCR-amplified using rice genomic DNA as template and B1-5 as forward primer and B1-sp (5'-GGGGGATCCGGGATTAAATAG CTGGGCCA-3' (SEQ ID NO:5), BamHI site underlined) as reverse primer. The truncated Apu encoding amino acid 106 to 1060 was PCR-amplified using genomic DNA of T. ethanolicus 39E as template and oligonucleotides 5'-CGGGATTCCTTAAGCTTGCATCTTGA-3' (SEQ ID NO:6) (BamHI site underlined) as forward primer and 5'-CCGGCGGCCGCCTACATATTTTC CCCTTGGCCA-3' (SEQ ID NO:7) (NotI site underlined) as reverse primer.

Paragraph beginning at page 15, line 9, has been amended as follows:

The PCR-amplified GluB-1 promoter and GluB-1 promoter-signal peptide sequence were digested with EcoRI and BamHI and subcloned into the same sites in pBluescript (Strategene) to generate pBS-G and pBS-Gp. The truncated Apu was digested with BamHI and NotI and fused downstream of the GluB-1 promoter and GluB-1 promoter-signal peptide sequence in pBS-G and pBS-Gp, respectively, to make translational fusion and to generate pBS-G-Ap and pBS-Gp-Apu. The nopaline synthase gene germinator (Nos 3') was PCR-amplified using pBI221 (Clontech) as DNA templete and oligonucleotide 5'-TCCGAGCTCCAGATCGTTCAAA CATTT-3' (SEQ ID NO:8) (SacI site underlined) as forward primer and oligonucleotide 5'-AGCGAGCTCGATCGATCTAGTAACAT-3' (SEQ ID NO:9) (SacI underlined) site as reverse primer. The Nos 3'UTR was digested with SacI and fused downstream of Apu in pBS-G-Apu and pBS-Gp-Apu to generate pBS-G-Apu-Nos and pBS-Gp-apu-Nos.

Applicant: Su-May Yu et al. Serial No.: 10/050,763 Filed

Page

: January 16, 2002

Paragraph beginning at page 15, line 20, has been amended as follows:

The 1.2 kb promoter and signal peptide sequence of aAmy8 was excised with SalI and HindIII from pAG8 (Chan et al., 1993, supra) and subcloned into pBluescript to generate pBS/8sp. The aAmy8 3'UTRs was PCR-amplified using RAMYG6a as DNA template and oligonucleotide 5'-CGCCGCGGTAGCTTTAGCTATAGCGAT-3' (SEQ ID NO:10) (SacII site underlined) as forward primer and oligonucleotide 5'-TCCCCGCGGGTCCTCTAAGTGAA CCGT-3' (SEQ ID NO:11) (SacII underlined) site as reverse primer. Plasmid RAMYG6a contains the 3' half portion of coding sequence and 3' flanking region of  $\alpha Amy8$  genomic DNA and was generated by screening of a rice genomic DNA library (Clontech) using aAmy8-C as a probe (Yu et al. (1992) Gene 122: 247-253). The αAmy8 3'UTRs was subcloned into the SacII sites in pBS/8sp to generate pBS/8sp8U. The truncated apu was cut with BamHI and NotI and subcloned into the same sites in pBS-8sp8U to generate pBS-αAmy8-sp-Apu-8U.

Paragraph beginning at page 16, line 24, has been amended as follows:

The truncated Apu encoding amino acids 106 to 1060 was PCR-amplified using genomic DNA of T. ethanolicus 39E as template and oligonucleotides 5'-CGCATATGTTAAGCTTGCA TCTTGATTC -3' (SEQ ID NO:12) as forward primer and 5'-CCGCTCGAGCTACATATTTT CCCCTTGGCCA-3' (SEQ ID NO:13) as reverse primer. The amplified DNA fragment was digested with NdeI and XhoI and ligated into the same sites in pET20b(+) (Novagen) to generate pET-APU. pET-APU was transferred to E. coli strain BL21 (DE3) and APU was expressed. Purification of APU was performed according to the instruction provided by Novagen. One hundred micrograms of purified APU was injected into a New Zealand White rabbit successively at 4-6 week interval according to the methods described by Williams et al. (1995, Expression of foreign proteins in E. coli using plasmid vectors and purification of specific polyclonal antibodies, in: DNA Cloning 2-Expression Systems-A Practical approach. (Ed) Glover and Hames, IRL Press, New York).